



1636

PATENT APPLICATION

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant(s) : Yang-Suk KIM et al

Title : SYSTEM FOR ANALYZING BIO CHIPS USING GENE ONTOLOGY  
AND A METHOD THEREOF

Serial No. : 10/579 504 Group: 1636

Confirmation No.: 6564

Filed : May 15, 2006 Examiner: Unknown

International Application No.: PCT/KR2004/002117

International Filing Date : August 23, 2004

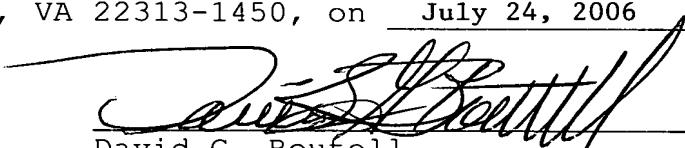
Atty. Docket No.: 5740.P0001US

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

FIRST CLASS MAILING CERTIFICATE

Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service under 37 CFR 1.8 as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 24, 2006.

  
David G. Boutell

DGB/DJW/jas

FLYNN, THIEL, BOUTELL & TANIS, P.C. 2026 Rambling Road Kalamazoo, MI 49008-1631 Phone: (269) 381-1156 Fax: (269) 381-5465	Dale H. Thiel David G. Boutell Terryence F. Chapman Mark L. Maki Liane L. Churney Brian R. Tumm Steven R. Thiel Donald J. Wallace Sidney B. Williams, Jr.	Reg. No. 24 323 Reg. No. 25 072 Reg. No. 32 549 Reg. No. 36 589 Reg. No. 40 694 Reg. No. 36 328 Reg. No. 53 685 Reg. No. 43 977 Reg. No. 24 949
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Correspondence: Request for Corrected Filing Receipt including enclosures listed thereon

190.05/05



## PATENT APPLICATION

IN THE U.S. PATENT AND TRADEMARK OFFICE

July 21, 2006

Applicant(s): Yang-Suk KIM et al

For: SYSTEM FOR ANALYZING BIO CHIPS USING GENE ONTOLOGY AND  
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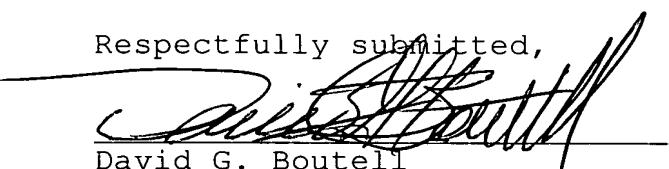
## REQUEST FOR CORRECTED FILING RECEIPT

Sir:

The Filing Receipt contains error(s).

Please see the attached red-corrected photocopy of the Filing Receipt and the high-lighted portions of the attached photocopy of the Declaration as filed with the Specification on May 15, 2006.

Respectfully submitted,

  
David G. Boutell

DGB/DJW/jas

FLYNN, THIEL, BOUTELL & TANIS, P.C. 2026 Rambling Road Kalamazoo, MI 49008-1631 Phone: (269) 381-1156 Fax: (269) 381-5465	Dale H. Thiel David G. Boutell Terryence F. Chapman Mark L. Maki Liane L. Churney Brian R. Tumm Steven R. Thiel Donald J. Wallace Sidney B. Williams, Jr.	Reg. No. 24 323 Reg. No. 25 072 Reg. No. 32 549 Reg. No. 36 589 Reg. No. 40 694 Reg. No. 36 328 Reg. No. 53 685 Reg. No. 43 977 Reg. No. 24 949
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Encl: Red-Corrected photocopy of Filing Receipt  
Copy of Declaration submitted May 15, 2006  
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## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/579,504	05/15/2006	1636	515	5740.P0001US	7	18	3

23474  
FLYNN THIEL BOUTELL & TANIS, P.C.  
2026 RAMBLING ROAD  
KALAMAZOO, MI 49008-1631

DHT \_\_\_\_\_ DGB \_\_\_\_\_ R/T \_\_\_\_\_  
TFC \_\_\_\_\_ MLM \_\_\_\_\_ L/C \_\_\_\_\_  
BRT \_\_\_\_\_ SRT \_\_\_\_\_ SBW \_\_\_\_\_

CONFIRMATION NO. 6564

FILING RECEIPT



\*OC000000019549670\*

JUL 20 2006

DW \_\_\_\_\_ KEP \_\_\_\_\_ BMG \_\_\_\_\_  
GMS \_\_\_\_\_ CMC \_\_\_\_\_ TLH \_\_\_\_\_  
FILE \_\_\_\_\_

Date Mailed: 07/11/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Yang-Suk Kim, Gyeonggi-do, KOREA, REPUBLIC OF;  
Jung-Uk Hur, ~~Mungyeong~~, Gyeongsangbuk-do, KOREA, REPUBLIC OF;  
Sung-Geun Lee, Busan, KOREA, REPUBLIC OF;

Gyeongsangbuk-do

Power of Attorney: The patent practitioners associated with Customer Number 23474.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/KR04/02117 08/23/2004

## Foreign Applications

REPUBLIC OF KOREA 10-2003-0060528 08/30/2003

If Required, Foreign Filing License Granted: 07/10/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/579,504**

Projected Publication Date: 10/19/2006

Non-Publication Request: No

Early Publication Request: No

**\*\* SMALL ENTITY \*\***

**Title**

System for analyzing bio chips using gene ontology and a method thereof

**Preliminary Class**

435

## **PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

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This license is to be retained by the licensee and may be used at any time on or after the effective date thereof

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## Declaration and Power of Attorney for Patent Application

## 특허 출원 관련 선언 및 위임권

## Korean Language Declaration

이미 저명된 발명자로서, 본인은 하기 사항을 선언합니다.

본인의 거주지, 우편 주소 및 국적은 본인의 성명 아래에 기재된 것과 동일합니다.

본인은 하기 명시된 발명에 대한 특허를 청구하는 주체의 최초 원예 단독  
발명자이거나 (아래에 한 이용인이 기재된 경우) 또는 최초 원예 공동  
발명자임을 (아래에 이어 이용인이 기재된 경우) 확인합니다.

As a below named Inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name.

I believe I am the original, first and sole Inventor (if only one name is listed below) or an original, first and joint Inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

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**SYSTEM FOR ANALYZING RNA CHIPS USING  
GENE ONTOLOGY AND A METHOD THEREOF**

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the specification of which is attached hereto unless the following box is checked:

was filed on August 23, 2004  
as United States Application Number or PCT  
International Application Number  
PCT/KR2004/002117 and was amended on  
(if applicable).

I hereby state that I have reviewed and understand the contents  
of the above identified specification, including the claims, as  
amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material  
to patentability as defined in Title 37, Code of Federal  
Regulations, § 1.56.

미합중국 출원번호 또는 PCT 국제 출원번호는  
\_\_\_\_\_  
또는  
\_\_\_\_\_  
인에 승인되었고  
\_\_\_\_\_  
인에 기정되었음  
(적당 경우).

본인은 상기 개정에 의해 수정된 상기 명세서는 물론 특허 청구의 내용을  
검討했으며 이해했음을 확인합니다.

본인은 연방 규정 그드인 제37 장의 제1.56 항에 의거하여 특허 과정에  
관한 자료 정보를 공개할 의무를 인정합니다.

This collection of information is required by 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 24 minutes to complete, including gathering, preparing, and examining the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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## Korean Language Declaration

본인은 외국인 특허 출원(등)이나 발명자와 출명서 관련 경우에는 미합중국  
또는 그도안 제35장의 제17,9(a)-(d) 항이나 제365(b) 항에 의거하여 또는  
미합중국 이외에 적어도 한 국가를 지정하는 PCT 국제 출원의 경우에는  
제365(a) 항에 의거하여 여기 명시된 특허 출원의 외국 우선권을  
주장하며, 외국인 특허 출원, 발명자 출명서 또는 우선권이 주장되는  
출원일 이전에 제출된 PCT 국제 출원도 또한 여기에 해당함을  
제로필으로서 확인하였습니다.

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed  
우선권 주장 안함

10-2003-0060528

(Number)  
(번호)

Rep. of Korea

(Country)  
(국가)

30 August 2003

(Day/Month/Year Filed)  
(출원일자 일/월/년)(Number)  
(번호)(Country)  
(국가)(Day/Month/Year Filed)  
(출원일자 일/월/년)

본인은 미합중국 그도안 제35장 제119항(c)에 명시된 바와 같이 여기  
미합중국 기출원에 관련된 특권을 요구합니다.

(Application No.)  
(출원 번호)(Filing Date)  
(출원일자)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

(Application No.)  
(출원 번호)(Filing Date)  
(출원일자)

본인은 미합중국 그도안 제35장의 미국인 출원(등) 관련 제120항에  
명시된 바와 같이 또는 미합중국을 지정하는 PCT 국제 출원 관련  
제365(c) 항에 명시된 바와 같이 하기 출원의 특권을 요구합니다. 이  
출원서에 있는 각 특허 청구의 내용이 미합중국 그도안 제35장  
제112항의 첫번째 항에서 명시된 바와 같이 충전의 미국 또는 PCT  
국제 출원에 반영되지 않았으면 본인은 현행 규정 그도안 제37장  
제1.56항에 명시된 바와 같이 충전 출원일자와 이 출원서의 국내 또는  
PCT 국제 출원일자 사이에 특허 자격에 대한 자료 정보를 공개함  
의무를 인정합니다.

(Application No.)  
(출원 번호)(Filing Date)  
(출원일자)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which becomes available between the filing date of the prior application and the national or PCT International filing date of this application.

(Application No.)  
(출원 번호)(Filing Date)  
(출원일자)(Status) (abandoned, pending, abandoned)  
(현황) (도록 확정, 출원중, 초기)

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정보나 소신의 모두 사실임을 확인하며, 더나아가 미합중국 그도  
안 제101장에 명시된 바와 같이 그의의 책임 전수 및 이와  
유사한 행위는 법규이나 투옥으로 처벌 방지나 벌금과 같은 형벌을 모두 받을  
수 있고, 이러한 그의의 책임 전수는 특히 출원이나 후에 출원된 특허의  
유보성을 위협하거나 이를 인지하면서 여기에 전승함을 선언합니다.

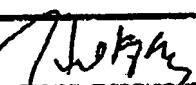
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issued thereon.

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**Korean Language Declaration****POWER OF ATTORNEY**

I hereby appoint the Practitioners associated with the Customer Number: 23474 as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize the correspondence address associated with the above-mentioned Customer Number.

만독 또는 첫번째 발명자의 성명	Full name of sole or first inventor Yang-Suk KIM	
발명자의 서명	일자	Inventor's signature  Date 05/03/06
거주지	Residence Gyeonggi-do, Rep. of Korea	
국적	Citizenship Republic of Korea	
우편 주소	Post Office Address Hyundai-Townville 506, 848-1 Janghang-dong, Ilsan-gu Goyang-si, Gyeonggi-do 411-380, Republic of Korea	
만약 있으면 두번째 공동 발명자의 이름	Full name of second joint inventor, if any Jung-Uk HUR	
두번째 발명자의 서명	일자	Second Inventor's signature  Date May 03, 2006
거주지	Residence Gyeongsangbuk-do, Rep. of Korea	
국적	Citizenship Republic of Korea	
우편 주소	Post Office Address 79-6 Jeomchon-dong, Mungyeong-si, Gyeongsangbuk-do 745-886, Rep. of Korea	

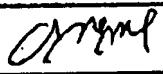
(세번째 그리고 차후의 공동 발명자들이 대한 유사한 정보와 그들의 서명을 제공할 것.)

(Supply information and signature for third and subsequent joint inventors.)

**Korean Language Declaration****POWER OF ATTORNEY**

I hereby appoint the Practitioners associated with the Customer Number: 23474 as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize the correspondence address associated with the above-mentioned Customer Number.

단독 또는 두번째 발명자의 성명	Full name of 3rd Inventor Sung-Geun LEE	
발명자의 성명	임자	Inventor's signature  Date May 04, 2006
거주지	Residence Busan, Rep. of Korea	
국적	Citizenship Republic of Korea	
우송 주소	Post Office Address LG Metrocity Apt. 104-1504, Yongho-dong,	
	Nam-gu, Busan 608-090, Republic of Korea	
만약 있으면 두번째 공동 발명자의 이름	Full name of 4th joint Inventor, if any	
두번째 발명자의 성명	임자	Second Inventor's signature Date
거주지	Residence	
국적	Citizenship	
우송 주소	Post Office Address	

(세번째 그리고 이후의 공동 발명자들에 대한 유사한 정보와 그들의 서명을 제공할 것.)

(Supply information and signature for third and subsequent joint inventors.)